

Bell Atlantic
1300 I Street, NW
Suite 400 West
Washington, DC 20005

Donald C. Brittingham
Director - Wireless Matters
Government Relations
202-336-7873



December 9, 1999

RECEIVED

DEC 9 1999

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 - 12th Street, SW
Room: TW-A325
Washington, DC 20554

EX PARTE OR LATE FILED

Re: WT Docket No. 99-168
"Service Rules for the 746-764 and 776-794 MHz Bands"

Dear Ms. Salas:

On December 7, 1999, Michael Centore and Ed Quinn of Bell Atlantic Mobile and the undersigned met with Marty Liebman, Tom Stanley, Stan Wiggins and Jay Jackson from the Wireless Telecommunications Bureau to discuss service rules for the 746-764 and 776-794 MHz bands. Bell Atlantic believes that the Commission should adopt rules to facilitate the use of these bands for commercial mobile radio services (CMRS). A summary of this meeting is provided herein.

Our meeting focused on Motorola's band plan proposal, presented in its ex parte communications of September 15, 1999. Motorola proposes a set-aside of 6 MHz of spectrum in the subject bands for private mobile radio services (PMRS) on the grounds that such a set-aside would provide necessary guard bands (1.5 MHz each) to protect public safety services in the adjacent 764-776 and 794-806 MHz bands. We also discussed rules proposed by Motorola in their ex parte communications of November 24, 1999 and subsequently revised on December 2, 1999, as well as an ex parte communications filed by Motorola on December 6, 1999.

Bell Atlantic opposes any set-aside of this spectrum for assignment through any means other than a fully competitive and open auction. While we understand the importance of protecting important public safety services from harmful interference, we do not believe that the levels of protection afforded by Motorola's proposal are necessary. Moreover, we question whether Motorola's proposal would afford the same level of protection to public safety from PMRS operating in the adjacent "guard bands".

No. of Copies rec'd 0 ✓ 1
List ABCDE

The "final rules" proposed by Motorola in their November 24 letter, and subsequently revised on December 2, specify a maximum transmit power of 100 watts for PMRS mobile units. Taking into account the gain of the antenna, the effective radiated power (ERP) of the PMRS mobile would likely exceed 200 watts. Despite these relaxed limits for PMRS operations, Motorola proposes a 7 watts ERP limit for CMRS mobile units. While Bell Atlantic believes that it can stay well within the 7 watts limit, it is clear that Motorola's proposal would place much more stringent requirements on CMRS than on PMRS systems. Furthermore, Motorola proposes stringent requirements on CMRS systems to protect PMRS systems. In its proposed rule § 27.53 (c)(3), Motorola proposes that commercial operators reduce their emissions within the 1.5 MHz PMRS bands by a factor of $69 + 10 \log (P) + 12 * (f - 762.5)$ dB (where f is the carrier frequency). This stringent limit is clearly designed to protect PMRS, and not public safety.

Motorola's December 6 letter is the most alarming of all. In it, Motorola posits that the potential interference into public safety from CMRS systems is greater than they originally estimated. Given the level of interference protection which Motorola believes is necessary, they claim that it would not be possible to implement any wideband data services in the subject bands without reversing the channel plan. This is based on potential interference from commercial mobile units interfering into public safety mobile units. However, Motorola does not address the resulting interference that would occur between base stations if the channel plan were reversed. Bell Atlantic's experts believe that this type of interference is likely to be more problematic than mobile-to-mobile interference.

Bell Atlantic is concerned about Motorola's conclusion that future commercial mobile services deployment may be inhibited in this band. However, we believe that this conclusion may have been reached based on interference protection criteria that is unnecessarily stringent. Bell Atlantic recently asked Lucent for an opinion on how Motorola's plan would affect commercial use of the band. Their preliminary view is attached. Lucent believes that the interference parameters proposed by Motorola may be even more restrictive than Motorola envisions, potentially rendering up to 50% of the band as unusable for commercial purposes. The prospects for such an outcome are untenable, and certainly not what Congress envisioned when it required that this band be auctioned for commercial services. Fortunately, Lucent concludes that such an outcome is not a fait accompli. They state that "the level of attenuation demanded by the Motorola proposal is excessive..., would place an unwarranted burden on the CMRS provider, significantly reduce the useable spectrum, and reduce the value of the spectrum to potential bidders". Lucent suggests that the Commission should consider adopting interference parameters that are more in line with those that have historically applied to current commercial systems.

Ms. Magalie Roman Salas, Secretary
December 9, 1999
Page 3

It is important to note that Motorola's analysis is based on the assumption that a W-CDMA technology platform is deployed. By Motorola's own admission, this is a worse case scenario since significantly less interference would result from deployment of other platforms, e.g., cdma2000. Bell Atlantic believes it is inappropriate, and inconsistent with longstanding FCC policy, to establish rules based on a single technology. The Commission should establish an out-of-band emission limit that is comparable to the $43 + 10 \log (P)$ limit that has applied to both commercial (§ 24.238) and public safety (§ 90.543) systems, and require both operators and manufacturers to design their systems to meet this standard.

Please include a copy of this ex parte presentation in the record for the above captioned proceeding. If you have any questions, you may call me on (202) 336-7873.

A handwritten signature in black ink, appearing to read "Dan Rattley". The signature is fluid and cursive, with the first name "Dan" and last name "Rattley" clearly distinguishable.

Attachment

cc: J. Jackson
M. Liebman
J. Schlichting
T. Stanley
S. Wiggins

700 MHz – PROTECTION OF ADJACENT PUBLIC SAFETY CHANNELS

Lucent has reviewed the technical rules proposed by Motorola in the 700 MHz proceeding (WT Docket 99-168). It is Lucent's belief that the rules which limit emissions from the CMRS band into adjacent public safety channels are unnecessarily stringent and would severely and negatively impact the useable spectrum in the band allocated for CMRS use. Specifically, it appears that Motorola's recommendation demands attenuation of the out of band energy almost 40 db in excess of that typically required of CMRS systems.

Current filter technology cannot provide the rolloff necessary to meet the suggested emissions mask and retain the use of the allocated spectrum. Indeed, in order to use available filter technology, initial estimates indicate the need for guard bands between the CMRS and public safety spectrum of up to 4.5 MHz at each interface. Accordingly, the requirement set forth by Motorola would render up to 50% of the allocated (18MHz) band unusable for commercial service. Moreover, even the allocation of 1.5 MHz for PMRS services at each edge of the CMRS band could not alone provide the necessary buffer for protection of the public safety channels that Motorola recommends.

Although the need for protection of the public safety channels is clear, the level of attenuation demanded by the Motorola proposal is excessive and, as explained, would place an unwarranted burden on the CMRS provider, significantly reduce the useable spectrum, and reduce the value of the spectrum to potential bidders. It may therefore be prudent to consider an emissions mask consistent with existing guidelines.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Magalie Roman Salas

December 3, 1999

Page 2

Any questions concerning this submission should be addressed to the undersigned.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Sara Seidman".

Sara F. Seidman

cc: Thomas Sugrue
Kathleen Ham
James Schlichting
Mark Bollinger

DCDOCS:161989.1(3GZP01!.DOC)